

ASBESTOS-CONTAMINATED VERMICULITE TIMELINE OF OPPT/OTS INVOLVEMENT

- 1971:** U.S. Bureau of Mines showed occupational fiber levels at Libby ranging from 13-71 f/cc.
OSHA PEL is 12 f/cc.
- 1972:** OSHA PEL is 5 f/cc.
EPA is operating after being established in 1970.
- 1974/5:** W.R. Grace initiated wet milling - fiber levels reduced to below 0.2 f/cc.
- 1976:** OSHA PEL is 2 f/cc.
TSCA enacted (October).
- 1977:** O.M. Scotts files 8(e) data on vermiculite health effects on its workers, initiating OTS review of vermiculite exposure.
- 1979:** Chemical Hazard Information Profile (CHIP) published based on Scotts' submission.
- 1980:** EPA, CPSC, and the Interagency Regulatory Liaison Group hosts symposium which includes a discussion of the health effects of vermiculite from Libby contaminated with asbestos.
Assessment Division completes Priority Review Level - I. (First stage of internal review - concludes worker risk is a concern and additional data needs to be gathered to determine additional risks).
- 1981:** Chemical Control Division develops draft options paper on asbestos containing vermiculite.
- 1981/2:** W.R. Grace submits an 8(e) notice discussing epidemiology studies on past/present workers at the Libby mine.
- 1982:** MRI asbestos contamination in vermiculite report issued.
NIOSH began study on the effects of tremolite exposure at Libby.

- 1983:** OTS decides not to pursue vermiculite as a priority; asbestos content < 1% (Clay letter to Courter).
- EPA completes review of Grace's 8(e) submission and distributes results to NIOSH, OSHA, CPSC, MSHA, and to other EPA offices.
- 1985:** EPA's final exposure assessment is published (no risk calculations are made).
- 1986:** Asbestos Ban and Phaseout Proposed Rule - excludes all products < 1% asbestos.
- W.R. Grace comments in support of Proposed rule.
- OSHA PEL is 0.2 f/cc.
- First comprehensive carcinogenicity assessment for asbestos is published.
- 1989:** Asbestos Ban and Phaseout Final Rule.
- 1990:** W.R. Grace closes the mine in Libby.
- 1991:** Court remands (strikes down) Asbestos Ban and Phaseout rule.
- 1994:** OSHA PEL is 0.1 f/cc (10⁻³ risk level).